Introduction

Project Goal

The primary goal of CDAT is to address the formidable challenges associated with analysis of simulations from global Earth System models. Through a combination of emerging community technologies, CDAT provides a seamless and powerful environment to enable the next phase of climate research.

Project Overview

The Climate Data Analysis Tools (CDAT) is a software infrastructure that uses Python, an object−oriented scripting language, to link together separate software subsystems and packages, thus forming an integrated environment for solving model diagnosis problems. The power of this software system comes from Python and its ability to seamlessly interconnect software. Python provides a general purpose and full−featured scripting language with a variety of user interfaces including command−line interaction, stand−alone scripts (applications) and graphical user interfaces (GUI). The CDAT subsystems, implemented as Python modules, provide access to and management of gridded data (Climate Data Management System or CDMS); large−array numerical operations (Numerical Python); and visualization (Visualization and Control System or VCS).

CDAT is a freely available open source package that is maintained, enhanced, and distributed freely by its user community. The home for CDAT sources and bug/patches can be downloaded from the PCMDI home page:

- http://www−pcmdi.llnl.gov

(Select the "SOFTWARE" menu, then the "About Software" menu item for more information on CDAT.)